



Certificate of Conformity

Certificate number: CM70018 Rev1

Certification Body:



Bureau Veritas Australia Pty Ltd
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Certificate Holder:



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THIS TO CERTIFY THAT
MaxiWall and MaxiFloor

Type and/or use of product:

MaxiWall is used as Internal and External Wall Systems suitable for houses, low rise and high rise multi-residential and commercial buildings. MaxiFloor System is suitable for flooring in houses and multi-residential and commercial buildings.

Description of product:

The MaxiWall and Maxifloor AAC Panel is a lightweight steel reinforced (AAC) building panel that is constructed of aerated concrete with a dry density of 510kg/m3 and a centrally located steel mesh reinforcement consisting of 4 x 5mm longitudinal bars and approximately 4 x 5mm transverse bars per linear meter length. Thickness 75mm Width: 600mm Length: 1200mm to 3300mm

COMPLIES WITH THE FOLLOWING BCA PROVISIONS AND STATE OR TERRITORY VARIATION(S)

BCA 2019

	Volume One	Volume Two	
Performance Requirement(s):	CP1 Fire Resistance	P2.1.1(a), (b)(iii)	Structural stability and resistance to actions
	CP2(a)(i)(ii)(iv) Fire Resistance	P2.2.2	Weatherproofing
	BP1.1(a), (b)(iii) Structural Provisions	P2.3.1	Protection from the spread of fire
	BP1.2 Structural Provisions	P2.3.4	Bushfire areas
	FP1.4 Damp And Weatherproofing	P2.4.6	Sound insulation
	FP5.2 Sound Transmission and Insulation	P2.6.1*	Energy Efficiency
	FP5.3 Sound Transmission and Insulation	P2.75	Buildings in bushfire prone areas
	FP5.4 Sound Transmission and Insulation		*Energy Efficiency does not apply in NT for Class 3 and 5 to 9 Buildings and Class 1, 2 and 4 NT BCA 2005. NSW Section J does not apply to Class 1, 2 and 4 buildings (BASIX applies).
	GP5.1 Construction in Bushfire Prone Areas		
Deemed-to-Satisfy Provision(s):	C1.1 inter alia Type of construction Spec C1.1	N/A	
	J1.2 * Thermal construction — general * as much as it is part of a system affecting J1.5, J1.6		

Sam Guindi – Product Certification Manager
Bureau Veritas Australia Pty Ltd

Daniel Darakas – Unrestricted Building Surveyor
Hendry Group Pty Ltd

Date of issue: 20 August 2020

Date of expiry: 17 July 2022



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State or territory variation(s):	SA C1.1	Type of construction required	SA P2.3.1	Protection from the spread of fire
	NSW GP5.1	Construction in Bushfire Prone Areas	Tas P2.3.4	Bushfire areas
	QLD GP5.1	Construction in Bushfire Prone Areas	Vic P2.6.1	Energy Efficiency
	Tas GP5.1(a)	Construction in Bushfire Prone Areas		

SUBJECT TO THE FOLLOWING LIMITATIONS AND CONDITIONS AND THE PRODUCT TECHNICAL DATA IN APPENDIX A AND EVALUATION STATEMENTS IN APPENDIX B

Limitations and conditions:

1. MaxiWall shall only be used for non-loadbearing applications where an FRL of up to -/180/180 is required.
2. To achieve a floor/ceiling FRL of (120)/120/120 the floor structural element shall be shielded from the lower compartment by 3 layers of 16mm fire grade plasterboard or as specified by the plasterboard manufacturer (Note: this does not remove the 10mm standard grade plasterboard requirement. For a (30)/30/30 FRL ceiling one layer 13mm fire grade plasterboard, for a (60)/60/60 FRL ceiling one layer 16mm fire grade plasterboard, and for a (90)/90/90 two layers of 16mm fire grade plasterboard.
3. The AAC panel shall be fixed to structural framing complying with AS1684 (volume as applicable) for timber framing and the NASH standard for steel framed residential and low rise buildings.
4. The MaxiWall AAC panel shall only be used in bushfire areas based on the FRL and when constructed in accordance with AS 5146: Part 3 Section 2.7.2 it will satisfy the requirements of AS3959 for Bushfire Attack Level FZ (BAL FZ).
5. MaxiWall and Maxifloor has been assessed as a product only for the purpose of this certification.

Building classification/s:

All building classes (1-10)

Scope of certification: The CodeMark Scheme is a building product certification scheme. The rules of the Scheme are available at the ABCB website www.abcb.gov.au. This Certificate of Conformity is to confirm that the relevant requirements of the Building Code of Australia (BCA) as claimed against have been met. The responsibility for the product performance and its fitness for the intended use remain with the certificate holder. The certification is not transferrable to a manufacturer not listed on Appendix A of this certificate.

Disclaimer: The Scheme Owner, Scheme Administrator and Scheme Accreditation Body do not make any representations, warranties or guarantees, and accept no legal liability whatsoever arising from or connected to, the accuracy, reliability, currency or completeness of any material contained within this certificate; and the Scheme Owner, Scheme Administrator and Scheme Accreditation Body disclaim to the extent permitted by law, all liability (including negligence) for claims of losses, expenses, damages and costs arising as a result of the use of the product(s) referred to in this certificate.

APPENDIX A – PRODUCT TECHNICAL DATA

A1 Type and intended use of product

MaxiWall is used as Internal and External Wall Systems suitable for houses, low rise and high rise multi-residential and commercial buildings. MaxiFloor System is suitable for flooring in houses and multi-residential and commercial buildings.

A2 Description of product

The MaxiWall and Maxifloor AAC Panel is a lightweight steel reinforced (AAC) building panel that is constructed of aerated concrete with a dry density of 510kg/m³ and a centrally located steel mesh reinforcement consisting of 4 x 5mm longitudinal bars and approximately 4 x 5mm transverse bars per linear meter length. Thickness 75mm Width: 600mm Length: 1200mm to 3300mm.

A3 Product specification

- MaxiWall Low-Rise Multi Residential External Wall System: HBG-001
- MaxiWall High-Rise Internal Wall System: HBG-002
- MaxiWall High-Rise External Wall System: HBG-003
- MaxiWall Low-Rise Residential Party Wall System – HBG-004

A4 Manufacturer and manufacturing plant(s)

STARKEN AAC SDN. BHD Plot 6, Jalan Bunga Azalea 1/2, Kawasan Industri Jalan Bunga Azalea, 48200 Serendah, Selangor Darul Ehsan, Malaysia

A5 Installation requirements

MaxiWall and MaxiFloor AAC Panels shall be installed in accordance with the following manuals:

- MaxiWall Low-Rise Multi Residential External Wall System Technical Guide, Ref.: HBG-001 (dated July 2017)
- MaxiWall High-Rise External Wall System Technical Guide, Ref.: HBG-003 (dated July 2017)
- MaxiWall High-Rise Internal Wall System Technical Guide, Ref.: HBG-002 (dated July 2017)
- MaxiWall Low-Rise Multi Residential Party Wall System Technical Guide, Ref.: HBG-004 (dated July 2017)
- MaxiFloor Installation Guide, Low-Rise Multi-Residential Buildings and Houses, BR-006 (dated December 2019)

A6 Other relevant technical data

N/A

APPENDIX B – EVALUATION STATEMENTS

B1 Evaluation methods

1. Structural Assessment - A2.2(2)(a)/A5.2(1)(e) – A report from a professional Engineer – Lignum Structural Ltd
2. Fire Rating Assessment - A2.2(2)(a)/A5.2(1)(d) - Report from a registered testing authority - CSIRO, and A2.2(2)(a)/A5.2(1)(e) – Report from a professional engineer - IGNIS Solutions
3. Combustibility assessment – A2.2(2)(a)/A5.2(1)(d) – Report from a professional engineer – IGNIS Solutions
4. Spread of fire assessment – A2.2(2)(a)/A5.2(1)(d) – A report from a registered testing authority – CSIRO, and A2.2(2)/A5.2(1)(e) – Report from a professional engineer – IGNIS Solutions, and A2.2(2)(c) – Expert Judgement – John Trenerry, Entertren Pty Ltd.
5. Weatherproofing Assessment – A2.2(2)(a)/A5.2(1)(e) – A report from a professional engineer – Ian Bennie and Associates
6. Acoustic Assessment - A2.2(2)(a)/A5.2(1)(e) – A report from a professional engineer – PKA Acoustic Consulting
7. Bushfire Assessment – A2.2(2)(a)/A5.2(1)(e) – Certificate from a professional engineer - Ignis Solutions and, A2.2(2)(d) – Comparison with the Deemed-to-Satisfy Provisions.
8. Energy Efficiency Assessment - A2.2(2)(a)/A5.2(1)(e) – A report from a professional engineer – James M Fricker Pty Ltd

B2 Reports

1. Enertren Pty. Ltd., Ref: PGS001 MaxiWall 75mm V.5, Engineering Report on MaxiWall 75mm AAC Wall Panel to AS 5146 Part 1, Part 2 and Part 3 (dated 25th March 2019)

This report provides the results of testing to AS 5146 Part 1, Part 2 and Part 3.

2. Enertren Pty. Ltd., Ref: PGS-007 MaxiWall 75mm V.3, Engineering Report on MaxiWall 75mm AAC Wall Panel to AS 5146 Part 1 and Part 2, (dated 25th March 2019)

This report provides the results of testing to AS 5146 Part 1 and Part 2.

3. Ignis Solutions, Assessment and Review of MaxiWall 75mm AAC Panel Wall System to Class's 1, 2, 3 and 10 (dated 9th January 2019)

This report provides an assessment and review of the Autoclaved Aerated Concrete Panel Wall system in relation to proposed use on applications for residential buildings being Class's 1, 2, 3 and 10.

4. Ignis Solutions, IGNS 6424-01 I01R00, Engineering Evaluation Certificate for MaxiWall 75mm AAC Panel Low Rise External Wall System (dated 9th January 2019)

This certificate is to document the applicable use and compliance of the MaxiWall 75mm Autoclaved Aerated Concrete Panel.

5. Ignis Solutions, IGNS 6424-02 I01R00, Engineering Evaluation Certificate for MaxiWall 75mm AAC Panel Low Rise Party Wall System (dated 9th January 2019).

This certificate is to document the applicable use and compliance of the MaxiWall 75mm Autoclaved Aerated Concrete Panel.

6. Ignis Solutions, IGNS 6424-03 I01R00, Engineering Evaluation Certificate for MaxiWall 75mm AAC Panel High Rise Party Wall System (dated 9th January 2019).

This certificate is to document the applicable use and compliance of the MaxiWall 75mm Autoclaved Aerated Concrete Panel.

7. Ignis Solutions, IGNS 6424-04 I01R00, Engineering Evaluation Certificate for MaxiWall 75mm AAC Panel High Rise External Wall System (dated 9th January 2019).

This certificate is to document the applicable use and compliance of the MaxiWall 75mm Autoclaved Aerated Concrete Panel.

8. Ignis Solutions, IGNS-6360 I1R00, Advisory Note on the MaxiWall 75mm AAC Panel Wall System (dated 9th October 2018)

This advisory note is to provide guidance on the installation of the Harpro 75mm AAC Wall System.

9. Ian Bennie & Associates, Test Report no. 2015-084-S1, Harpro External Wall System testing to AS/NZS 4284:2008, (dated 19th October 2015)

This report provides the results of testing to AS/NZS 4284:2008.

10. Acoustic Performance Assessment, ID: PKA100HBG R01v3, Acoustic Assessment of MaxiWall 75 AAC Panel to the BCA Part F5 (dated 24th September 2018)

This report provides the acoustic performance for the MaxiWall 75 AAC panel.

11. Acoustic Performance Assessment, ID: PKA105HBG R01v1, Acoustic Assessment of MaxiWall 75 AAC Panel – External Walls to the (dated 19th February 2019)

This report provides the acoustic performance for the MaxiWall 75 AAC panel for external walls.

12. James M Fricker Pty Ltd, Report i443a2, Thermal Performance Calculations for MaxiWall 75 AAC Panels to AS/NZS 4859.1:2002/Amdt 1 2006 (dated 18th February 2019)

This report provides the results of testing to AS/NZS 4859.1:2002/Amdt 1.

13. James M Fricker Pty Ltd, Report: RD19107, Test Report of MaxiWall 75 AAC Panel to AS/NZS 4859.1:2002/Amdt 1 2006 (dated 27th February 2019)

This report provides a review and endorsement of the Thermal Insulation Evaluation.

14. Enertren Pty. Ltd., Ref: BRG-001- MaxiWall 75mm V.3, Engineering Report on MaxiWall 75mm AAC Floor Panel to AS 5146 Part 1, Part 2 and Part 3 (dated 25th March 2019)

This report provides the results of testing to AS 5146 Part 1, Part 2 and Part 3.

15. Ignis Solutions, IGNS 6424-05 I01R00, Engineering Evaluation Certificate for MaxiWall 75mm AAC Panel Floor System (dated 9th January 2019)

This certificate is to document the applicable use and compliance of the MaxiWall 75mm Autoclaved Aerated Concrete Panel.

16. Ignis Solutions, IGNL 3016-01 I01R01, Material Fire Test Report for MaxiWall 50mm and 75mm AAC Panel (dated 23rd February 2019)

This report provides the results of testing to AS1530.1-1994 R2016 of the MaxiWall 50mm and 75mm Autoclaved Aerated Concrete Panel.

17. Ignis Solutions, IGNL 3016-01 I01R00, Material Fire Test Certificate for MaxiWall 50mm and 75mm AAC Panel System (dated 9th January 2019)

This certificate is to document the applicable use and compliance of the MaxiWall 50mm and 75mm Autoclaved Aerated Concrete Panel.

18. Ignis Solutions, IGNS-7101 I1R00, Advisory Note on the MaxiWall 50mm and 75mm AAC Panel Wall System (dated 9th October 2018)

This advisory note is to provide guidance on the MaxiWall 50mm and 75mm AAC Wall System and its compliance to bushfire prone areas.

19. Ignis Solutions, Ref: IGN-6321 I1R00, Product Evaluation Report of MaxiWall 75mm AAC Floor and Wall Panel (dated 5th September 2018)

This report provides an evaluation of the Autoclaved Aerated Concrete Floor and Wall Panel in relation to proposed use on applications for residential buildings being Class's 1, 2, 3 and 10.